CLAIMS

1. A method of displaying a character, the method comprising:

   determining a representation of a character in a bit map having a number of bits greater than a number of pixels in a region of a display in which the character is to be displayed;

   based on a relative number of bits that are on in respective portions of the bit map, determining luminances for corresponding pixels; and

   displaying the character in the region having the particular number of pixels, the pixels being displayed with the determined luminances.

2. The method of claim 1, wherein determining a representation of the character in a bit map includes generating the bit map based on a vector representation of the character.

3. The method of claim 2, wherein the vector representation of the character comprises an Adobe™ character.

4. The method of claim 2, wherein the vector representation of the character comprises an Adobe Type 1™ character.

1   5.   The method of claim 1, wherein the number of bits in the bit map is

2   at least twice as great as the number of pixels in the region.

1   6.   The method of claim 1, wherein the number of bits in the bit map is

2   at least four times as great as the number of pixels in the region.

1   7.   The method of claim 1, wherein the number of bits in the bit map is

2   at least ten times as great as the number of pixels in the region.

1   8.   The method of claim 1, wherein the luminance of a pixel is

2   substantially at a minimum level if substantially all of the bits in the corresponding

3   bit map are on.

1   9.   The method of claim 1, wherein the luminance of a pixel is

2   substantially maximum if substantially all of the bits in the corresponding bit map

3   are off.

1   10.   The method of claim 1, wherein a respective portion of the bit map

2   includes four sets of 4 bits.

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1   11.   The method of claim 10, including counting the number of bits that

2   are on in the four sets of 4 bits.

1   12.   The method of claim 10, wherein the four sets of four bits comprises

2   four halves of four bytes in a memory.

1   · 13.   The method of claim 1, wherein determining luminances comprises:

2   for at least a subset of bits in a respective portion of the bit map,

3   using a table to determine the number of bits on in the subset, and

4   adding the number of bits on for all subsets of bits in the portion of

5   the bit map.

1   14.   The method of claim 13, wherein the subset of bits comprises a byte.

1   15.   The method of claim 13, wherein the subset of bits comprises four

2   sequential bits in a byte.

1   16.   A system for displaying a character, the character to be displayed

2   within a region of a display having a particular number of pixels, the system

3   comprising:

4   logic that renders a bit map corresponding to a vector representation of the

5   character;

6   logic that causes the logic that renders to render a bit map having a number

7   of bits, the number of bits greater than the particular number of pixels;

8   logic that, based on a relative number of bits that are on in respective

9   portions of the bit map, determines luminances for corresponding pixels; and

10   logic that causes the character to be displayed in the region having the

11   particular number of pixels, the pixels having the determined luminances.

1   17.   The system of claim 16, wherein the number of bits in the bit map is

2   at least twice as great as the number of pixels in the region.

1   18.   The system of claim 16, wherein the number of bits in the bit map is

2   at least four times as great as the number of pixels in the region.

1   19.   The system of claim 16, wherein the number of bits in the bit map is

2   at least ten times as great as the number of pixels in the region.

1   20.   The system of claim 16, wherein the vector representation of the

2   character comprises an Adobe™ character.

1   21.   The system of claim 16, wherein the vector representation of the

2   character comprises an Adobe Type 1™ character.

1   22.   The system of claim 16, wherein a respective portion of the bit map

2   includes at least four sequential bits in a memory.

1   23.   The system of claim 16, wherein the logic that determines

2   luminances, for at least a subset of bits in a respective portion of the bit map,

3   uses a table to determine the number of bits on in the subset, and

4   adds the number of bits on for all subsets of bits in the portion of the

5   bit map.

1   24.   The system of claim 16, the display comprising a television.

1   25.   The system of claim 16, the display comprising a color television.

1   26.   The system of claim 16, the display comprising a display of a hand

2   held device.

1   27.   The system of claim 16, the display comprising a billboard.

1   28.   The system of claim 16, comprising logic for communication with the

2   internet.

1   29.   The system of claim 16, comprising web browser logic.

30.   A method for displaying a shape, the shape to be displayed a

2   particular size on a display, the method comprising:

3   requesting a bit map rendering of the shape in which the shape has a size

4   larger than the particular size;

5   based on the bit map, determining luminances for corresponding pixels of a

6   rendering of the shape on the display having the particular size; and

7   displaying the shape on the display in the particular size with the pixels the

8   determined luminances.

1   31.   The method of claim 30, wherein determining luminances comprises

2   counting a number of bits on in a portion of the bit map corresponding to a pixel.

1   32.   The method of claim 30, wherein the size larger than the particular

2   size is at least twice as wide as the particular size.

1   33.   The method of claim 30, wherein the size larger than the particular

2   size is at least ten times as wide as the particular size.

1   34.   The method of claim 30, wherein the shape comprises a character.

1   35.   The system of claim 30, the display comprising a television.

1   36.   The system of claim 30, the display comprising a color television.

1   37.   The system of claim 30, the display comprising a display of a hand

2   held device.

1   38.   The system of claim 30, comprising logic for communication with the

2   internet.

SUBC4Y   39.   A television system comprising:

2   electronics for displaying images on a display in response to a television

3   signal; and

4   logic for displaying a character, the character to be displayed within a region

5   of the display having a particular number of pixels, the logic comprising:

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6   logic that renders a bit map corresponding to a vector representation

7   of the character;

8   logic that causes the logic that renders to render a bit map having a

9   number of bits, the number of bits greater than the particular number of

10   pixels;

11   logic that, based on a relative number of bits that are on in respective

12   portions of the bit map, determines luminances for corresponding pixels; and

13   logic that causes the character to be displayed in the region having the

14   particular number of pixels, the pixels being displayed on the display in

15   response to the determined luminances.

1   40.   The system of claim 39, wherein the television signal comprises a

2   terrestrial television broadcast signal.

1   41.   The system of claim 39, wherein the television signal comprises a

2   cable television signal.

1   42.   The system of claim 39, wherein the number of bits in the bit map is

2   at least twice as great as the number of pixels in the region.

1   43.   The system of claim 39, wherein the number of bits in the bit map is

2   at least ten times as great as the number of pixels in the region.

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44.   The system of claim 39, wherein the vector representation of the

2   character comprises an Adobe™ character.

1   45.   The system of claim 39, wherein the vector representation of the

2   character comprises an Adobe Type 1™ character.

1   46.   The system of claim 39, wherein a respective portion of the bit map

2   includes at least four sequential bits in a memory.

1   47.   The system of claim 39, wherein the logic that determines gray levels,

2   for at least a subset of bits in a respective portion of the bit map,

3   uses a table to determine the number of bits on in the subset, and

4   adds the number of bits on for all subsets of bits in the portion of the

5   bit map.

1   48.   The system of claim 39, comprising logic for communication with the

2   internet.

1   49.   The system of claim 39, comprising web browser logic.

1   50.   A computer program product for displaying a character, the character

2   to be displayed within a region of a display having a particular number of pixels, the

3   computer program product comprising:

       a computer usable medium having computer readable program code means

5   embodied in the medium, the computer readable program code means having:

6   computer readable program code means for rendering a bit map

7   corresponding to a vector representation of the character;

8   computer readable program code means for causing the logic that

9   renders to render a bit map having a number of bits, the number of bits

10   greater than the particular number of pixels;

11   computer readable program code means for, based on a relative

12   number of bits that are on in respective portions of the bit map, determining

13   luminances for corresponding pixels; and

14   computer readable program code means for causing the character to

15   be displayed in the region having the particular number of pixels, the pixels

16   having the determined luminances.

1   51.   The computer program product of claim 50, wherein the number of

2   bits in the bit map is at least twice as great as the number of pixels in the region.

1   52.   The computer program product of claim 50, wherein the number of

2   bits in the bit map is at least four times as great as the number of pixels in the region.

1   53.   · The computer program product of claim 50, wherein the vector

2   representation of the character comprises an Adobe™ character.

1   54.   The computer program product of claim 50, comprising computer

2   readable program code means for communication with the internet.

1   55.   The computer program product of claim 50, comprising web browser

2   computer readable program code means.

1   56.   A system for displaying a character, the character to be displayed

2   within a region of a display having a particular number of pixels, the system

3   comprising:

4   logic that renders a bit map corresponding to a vector representation of the

5   character;

6   logic that causes the logic that renders to render a bit map having a number

7   of bits, the number of bits greater than the particular number of pixels;

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8   logic that, based on a relative number of bits that are on in respective

9   portions of the bit map, determines an attribute for corresponding pixels; and

10   logic that causes the character to be displayed in the region having the

11   particular number of pixels, the pixels being displayed on the display having the

12   determined attributes.

1   57.   The system of claim 56, wherein the attribute comprises hue.

1   58.   The system of claim 56, wherein the attribute comprises saturation.

1   59.   The system of claim 56, wherein the attribute comprises luminance.

1   60.   The system of claim 56, wherein the number of bits in the bit map is

2   at least twice as great as the number of pixels in the region.

1   61.   The system of claim 56, wherein the number of bits in the bit map is

2   at least four times as great as the number of pixels in the region.

1   62.   The system of claim 56, wherein the number of bits in the bit map is

2   at least ten times as great as the number of pixels in the region.

63.   The system of claim 56, wherein the vector representation of the

2   character comprises an Adobe™ character.

1   64.   The system of claim 56, the display comprising a television.

1   65.   The system of claim 56, comprising logic for communication with the

2   internet.